

46 BC

Although from the beginning of the Christian Era, the Christians followed the Julian solar calendar of 46 BC. for general purposes and with it adapted the Roman usage of counting the days of the month in a continuous series in relation to NONES, IDES, and KALENDS, they also evolved a specifically Christian Calendar, the center of which

was the day of Resurrection

46 B.C.

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Julius Caesar created the Julian  
Calendar in 46 B.C.

On Average Julian Calendar  
is 365 days 6 hours long.

From Autumnal Equinox  
to another is 365 days 5 hrs 48 min  
and about 45 sec.

46BC

The Roman calendar had been inferior to the Egyptian and had got 3 mos out of the way, so that the spring equinox came in June.

To correct the error Caesar made the year 46BC ("the last year of confusion") consist of 445 days and for the future

instituted the system of leap yrs.  
as the reform was based upon  
the Egyptian system.

Caesar also decreed that  
the beginning of the year  
be Jan. 1.

## JULIAN Calendar. 46 BC

The Calendar instituted by Julius Caesar in 46 B.C., which was in general use in Western Europe until the introduction of the Gregorian Calendar in 1582, and still used in England until 1752 and until 1918 in Russia. To allow for the odd  $\frac{1}{4}$  of a day Caesar ordered that every 4th year should contain 366 days, the additional day being

introduced after the 6th before the  
CALENDAR of March i.e. 24 February.

Cesar also divided the months into  
the number of days they at present  
contain. It is now called "the  
Old Style"

Feb

46 BC - 45 BC

## JULIAN CALENDAR REFORM

- 1) Adjust vernal equinox to March 25<sup>th</sup> by intercalation of the months in 46 BC; a year that came to be known as "Year of Confusion" this yr was 445 days long.
- 2) Abandon totally the true lunar synodic month as a calendar base by introducing 12 alternating 30- and 31-day months that added



to 365 days

- 3) To plan for future, in every 4<sup>th</sup> year let one day be added to the year at the end of February. Averaged over a 4-year period then, the length of man-made year would become 365.25 days, a close fit to the natural one

46BC

SOSIGENES, chief advisor on  
calendar matters to Julius Caesar. By  
observation: civil time was already  
out of joint with nature  
astronomical time by 3 months  
to restore vernal equinox to  
March 25.

46 BC

The lunisolar calendar then in use in Rome had been subject to political manipulation, and by Caesar's time had accumulated an error of about 80 days.

An Alexandrian astronomer named SOSIGENES furnished Caesar with an explanation of the solar calendar used in Egypt (see 773 BC) and in 46 BC. Caesar ordered its adoption as the official calendar of Rome. Instead of the unchanging

365-day yr, however, this Julian calendar took cognizance of the additional fraction, and, assuming that this fraction was 0.25 day, provided for the regular intercalation of one day every fourth yr.

46 BC  
52 BC

## CALENDAR

Since 52 BC, the priests had  
not inserted enough extra months  
and the calendar was now (46 BC)  
two months in advance of the <sup>Autumn in</sup> ~~year~~ season. As dictator in 45 BC <sup>Summer in</sup> ~~Oct + Nov~~  
Caesar introduced the solar calendar  
of Egypt with  $365\frac{1}{4}$  days i.e. an  
ordinary year of 365 days and 366

YEAR 46BC MUST HAVE BEEN

JAN

SEPT

FEB — ADD 23 DAYS

OCT

MAR

NOV — 67 days add

APR

DEC

MAY

JUN

QUINTILIS

SEXTILIS

TOTAL 90 DAYS

Added

46BC was 445 days

46BC

## JULIUS CAESAR

When Caesar seized power, he gave Cal. reform  
from an Egyptian named SOSIGENES. 46BC  
was ordered to be 445 days long. There  
was to be a leap day every 4th year.  
Caesar changed the seventh month to JULIUS.  
Changed Februaries to 29 days in common yrs  
and 30 days every 4th year.  
(over)

JANUARIUS - 31 days

FEBRUARIUS - 28 or 30

MARTIUS - 31

APRILIS - 30

MAIUS - 31

JUNIUS - 30

JULIUS - 31

SEXTILIS - 30

SEPTEMBRIS - 31

OCTOBRIS - 30

NOVEMBRIS - 31

DECEMBRIS - 30

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365 or 366 days.



46 B.C.

Julius Caesar decreed that the year should begin Jan. 1. and that February should be the 2nd month instead of 12th.

This made December the 12th month

<sup>46BC</sup>  
Since 58 BC to 47 BC

Since 58 B.C there had been only  
one intercalation. The calendar year  
got to be 90 days ahead of solar  
year.

46BC

In 46BC "the last year of confusion" Julius Caesar, by virtue of his authority as Pontifex maximus and Dictator increased the year to 445 days, adding 23 days after Feb. 2 and 67 before Nov 4 Dec. The former regular year had been 355

$$355 + 23 + 67 = 445$$

46 B C

Cassius reformed the calendar, that the pontiff decided by neglecting to order the necessary intercalations, that the harvest festival did not come in summer nor those of the vintage in autumn. He adjusted the year to the sun's course by making it consist of 365 days, abolishing the intercalary month and adding one day every 4th year.

Furthermore that the correct reckoning

of time might begin with the next  
Kaband of January, he inserted two  
additional months between November  
and December of 46BC (which was  
thus lengthened to 445 days). Hence  
the year in which these arrangements  
were made was one of 15 months  
including the intercalary month  
which belonged to that year according  
to the former C<sup>te</sup> system.

46 BC

### JULIAN CAL.

By 46 BC, when Julius Caesar was made Pontifex Maximus, calendar date had become decidedly out of step with natural events. So many complaints had been lodged that Caesar had the opportunity to effect radical changes. Caesar extended the year 46 BC upon the advice of SOSIGENES, an Alexandrian astronomer. He added 23 days of

an intercalary month after Februarius,  
and he added two months of 34 and  
33 days between November and  
December so that the year contained  
445 days and was called the  
'year of confusion'.

46 BC

By time of Julius Caesar, the calendar was in hopeless confusion, so far out of step that winter weather was occurring in the spring. In the year that we call 46 BC, Caesar decreed a fresh start. Following a traditional 'year of confusion' of 445 days, his first 'Julian year' began on Jan. 1 of the ~~708th~~ year from the founding of Rome ~~708~~ A.V.C. (ab-



in the Condita) or 752-753 BC. Except for the Greek dating by Olympiads from 776 BC; this was the first opportunity for historians to specify the exact year of any event, though few of them seem to have valued such precision before HERODOTUS, three centuries later, whose dates have been proved substantially correct.